



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,347	10/31/2003	Xiaochun Li	539.005	2522
23598	7590	01/31/2007	EXAMINER	
BOYLE FREDRICKSON NEWHOLM STEIN & GRATZ, S.C. 250 E. WISCONSIN AVENUE SUITE 1030 MILWAUKEE, WI 53202			EVANS, GEOFFREY S	
		ART UNIT		PAPER NUMBER
		1725		
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/31/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/699,347	LI, XIAOCHUN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Geoffrey S. Evans	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>20051024</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: ____.

## DETAILED ACTION

1. The information disclosure statement filed 24 October 2005 has not had its foreign references considered because complete copies have not been supplied as required under 37 CFR 1.98(a)(2).
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,2, and 3 are rejected under 35 U.S.C. 102(a) as being anticipated by Yamazaki in Japan Patent No. 2001-178,434. Yamazaki discloses using the third harmonic of a YAG laser (see paragraph 36), which has a known wavelength of 354 nm, to ablate (see paragraph 11) the skin of a potato. Yamazaki further discloses controlling the focus spot size to have a linear shape.

4. Claims 1-3,9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Neill in U.S. Patent No. 6,394,889. O'Neill discloses using a pulsed excimer laser to ablate fatty connecting tissue of an animal (see column 7,lines 15-20). O'Neill further

Art Unit: 1725

discloses controlling the depth of the ablation based upon the power level (see column 7,lines 16-18).

5. Claims 1-3,7,9-22 are rejected under 35 U.S.C. 102(b) as being anticipated by L'Esperance, Jr. in U.S. Patent No. 5,312,320. L'Esperance, Jr. teaches using a laser beam with UV radiation equal to 266 nm (see column 7,line 11) that can be used for laser ablation of an organic material (an eye), which is therefore considered capable of ablating a food product. The irradiated flux density is controlled to achieve the desired depth of cut (e.g. see abstract). L'Esperance, Jr. discloses using a pulsed laser (see column 4,lines 27-40). Regarding claim 22, the workpiece of claim 22 (an eye) is considered to be food, at least to man-eating animals, flesh eating bacteria and cannibals.

6. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Kliewer et al. in U.S. Patent No. 6,572,606. Kliewer discloses a laser that generates ultraviolet radiation (see column 6,line 17), selecting focus spot size (see column 7,lines 3-10), radiation pulse repetition rate (see column 6,lines 17-18), and laser beam power (see column 7,lines 11-22) to photoablate an eye. An eye is considered to be food.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1725

8. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over L'Esperance, Jr. in U.S. Patent No. 5,312,320 in view of Morris et al. in U.S. Patent No. 6,472,295. Morris et al. teaches selecting the repetition rate (pulse rate) to achieve the desired cut rate and depth (see column 3, lines 52-55). It would have been obvious to adapt L'Esperance, Jr. in view of Morris et al. to control the pulse rate to achieve the desired cut rate.

9. Claims 5,6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over L'Esperance, Jr. in U.S. Patent No. 5,312,320 in view of Oikawa et al. in Japan Patent No. 10-249,571. Oikawa et al. teaches changing the machining depth by adjusting the processing speed. It would have been obvious to adapt L'Esperance, Jr. in view of Oikawa et al. to provide this to change the machining speed to adjust a processing characteristic (i.e. machining depth). Regarding claim 8, L'Esperance, Jr. discloses using a laser beam with UV radiation equal to 266 nm (see column 7,line 11).

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Luigi in EP 685,154 laser marks cheese. O'Brien et al. in U.S. Patent No. 5,334,084 in column 16,lines 12-14 discloses using an excimer laser to laser cut an animal carcass.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Mon-Fri 6:30AM to 4:00 PM, alternate Fridays off.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571)-272-1292. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

GSE

*Geoffrey S. Evans*  
Geoffrey S. Evans  
Primary Examiner  
Group 1700